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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/919,140	07/31/2001	George E. Berkey	Berkey 33B	4776

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CORNING INCORPORATED
SP-TI-3-1
CORNING, NY 14831

EXAMINER

HOFFMANN, JOHN M

ART UNIT	PAPER NUMBER
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1731

DATE MAILED: 12/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/919,140

Applicant(s)

BERKEY, GEORGE E.

Examiner

John Hoffmann

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) 30-41 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-29, drawn to a method of making a fiber, classified in class 65, subclass 407.
- II. Claims 30-41, drawn to an optical fiber, classified in class 385, subclass 123.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product can be made by a materially different process, such as with a double-crucible method.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

During a telephone conversation with Joseph Homa on 1December 2003 a provisional election was made with traverse to prosecute the invention of Group 1, method, claims 1-29. Affirmation of this election **must** be made by applicant in replying

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to this Office action. Claims 30-40 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Information Disclosure Statement

The information disclosures statement filed 15 September 2003 and Jan 14, 2002 fail to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

There was no copy of the 4 Japanese patents. Although English language abstracts were received, the Office will not indicate that the foreign patents were considered, because they were not considered. If Applicant wishes the Office to only considered an English language abstract - then such should be indicated in the "OTHER ART" section of the PTO 1449. And it MUST include the source of the abstract. Different companies/agencies publish different abstracts - and it must be stated which is to be considered.

JP 57-111255 was submitted, but it was missing page 2. Thus the PTO cannot state that the (entire) patent was considered.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-17 and 28-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Last line of claim 1: there is no antecedent basis for "the majority". There could be innumerable majorities.

Claim 1 refers to severing. The specification uses severing in two different senses. Page 16 uses the term using two different senses: line 7 refers to "the fiber that will be severed"; line 18 refers to a section which is severed from the rest of the fiber. The two senses are essentially: (1) cutting into two pieces, (2) cutting off. Depending upon which sense is used, the claimed severing requires either (1) having the selected portion, and then severing that selected portion to create two (or more portions) whose two lengths, when added together will equal the length of the original selected portion; or (2) severing the selected portion from the rest of the fiber length, so as to result in a single, intact selected portion. It is unclear which definition/sense applies to the claim. When using the second sense, the specification uses the preposition "from" (severing from) but the claim does not use this. On the other hand, from the specification's discussion of selected portion, it seems that it should be this second sense. When a term can have more than one definition, it must be clear which definition is being used.

Claim 11: there is no antecedent basis for "the consolidation temperature"

Claim 28: it is unclear which pellet "the pellet" refers to.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berkey EP 0737873.

See figure 30a and the associated text of Berkey. 266 is the tube, 250 and 252 are the pellets. The Heating and pulling would have been necessary to draw the preform. Berkey does not disclose the severing. It would have been obvious to sever the fiber: so as to remove one or both ends, which would not have been useable; so as to create a clean flat surface; or to so that one can have the exact length of fiber desired.

Using the first sense of 'sever' (see above 112 Rejection) it is clear that it would have a transition region - before it is cut.

As to the at least part of the transition region "forms" the majority of the selected portion. The term "forms" is not defined in the specification. Examiner found the following definition in a dictionary: "to serve to make up or constitute: be an essential or basic element of". This appears to be a reasonable definition. Examiner did not find a

broader definition. Therefore it is deemed that the broadest reasonable interpretation for this limitation requires that the transition region be a basic element of a majority.

In other terms: the limitation could be given two different interpretations: -the majority comprises the transition region,- or -the majority consists of the transition region--. Since "comprising" is broader than "consisting", the Office interprets the limitation as requiring that the majority comprises the transition region. It is clear that the transition region would be an essential or basic element of the fiber; without it, a signal would not could not get from one end of the fiber to the other.

Claim 2: See feature 268 of figure 30a

Claim 3: see col. 22, line 39.

Claims 4-6 requires that the selected portion have a length. It would have been obvious to have the starting end of the fiber (or the ending length of the fiber) to be as short as possible- so as to minimize waste. Alternatively, it would have been obvious to have defective regions as short as possible - so as to minimize waste. It would have been obvious to have any or all of these lengths to be less than 3 meters. It does not appear that the claim was intended to mean: "the selected portion is no longer than 10 meters.

Alternatively, Applicant's selected portion is arbitrarily chosen. One can arbitrarily choose a 2 meter length in any portion of the Berkey fiber. When one makes a cut, that arbitrary length would have been severed from the rest of the fiber. Alternatively, if the severing occurs along that arbitrary length, then the length is severed into two.

Still further, the claim does not define what "m" is in the term "3m". It is noted that 3m is an algebraic form of "3 x m". One can arbitrarily designate "m" so that it equals the total length of the drawn fiber.

Claims 8-10 are clearly met.

Claims 11-13: see col. 22, lines 27-32: the glass is heated to 1450 which is between 1400-1550. It is clear that the preform is heated to all temperatures below 1450 - including to temperatures that are less than the consolidation temperature. Applicant has set forth in claim 13, that heating to a temperature between 1000 and 1400 can simply be a midpoint between heat to a temperature above 1400. Alternatively, it would have been obvious to not heat all of rod 270 to the highest temperature, because it would simply take extra time and energy to do so. Further it would have been an obvious matter of routine experimentation to determine the optimal processing parameters. Still further: since there is no antecedent basis for "the consolidation temperature" the claim is interpreted as "a consolidation temperature". 1500 is clearly "a consolidation temperature".

For claim 12 it is deemed that 1451 is "about 1400".

Claims 14-15, it would have been an obvious matter of routine experimentation to determine the optimal temperature for fiber drawing.

Claims 16-17: col. 7, lines 19-28 states that lengths are joined. It would have been obvious to fusion splice two long fibers to make an even longer fiber. Claim 17: it is clear that both lengths would have both dispersions.

Claims 18-20 and 22-25 are clearly met.

Claim 21: there is no mention of dopants. It would have been obvious to use different dopants, because dopants impart different changes to the refractive index, and the refractive indices have to be different. If the compositions were not different, they would be identical and would have identical properties.

Claim 26: beginnings and endings are transitions. Thus the end and beginning of the fiber are transition fibers. It would have been obvious to sever them because they would not be usable.

Claim 27 it would have been obvious to try various pellets with various compositions as part of the routine experimentation. One could use at least 3 different pellets. It is noted that the claim does not require that the three types are used in a single tube. One could use two pellets in one tube. And two completely different types in the another. Alternatively "type" is rather broad. It is deemed that Berkey has three different types: bottom, middle and top. Since there is no requirement that "type" refers to size, shape, composition or location, it is open to any.

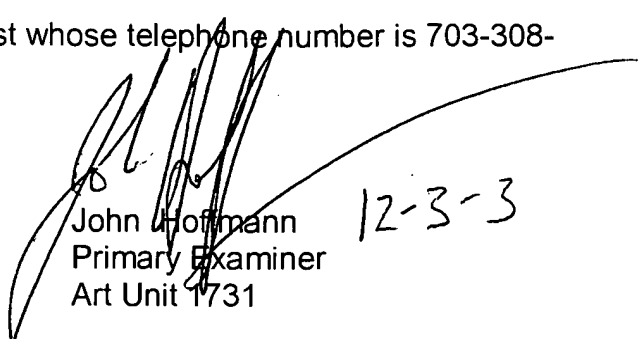
Claims 28-29: see col. 22, lines 2-7.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Hoffmann whose telephone number is 703-308-0469. The examiner can normally be reached on Monday through Friday, 7:00- 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Griffin can be reached on 703-308-1164. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.



John Hoffmann
Primary Examiner
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